CANADA

National Energy Board

Reasons for Decision

St. Clair Pipelines Ltd. and TransCanada PipeLines Limited

GH-3-88

October 1988

Pipeline Facilities

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Applications to Authorize the Construction of Facilities to Transport Gas Across the St. Clair River

GH-3-88

October 1988

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Recital and Appearances

IN THE MATTER OF the National Energy Board Act and the Regulations made thereunder; and

IN THE MATTER OF an application by St. Clair Pipelines Ltd., pursuant to section 49 of the National Energy Board Act, to authorize the construction of certain facilities across the St. Clair River, and

IN THE MATTER OF an application by TransCanada PipeLines Limited, also pursuant to section 49 of the National Energy Board Act, to authorize the construction of 3.3 km of pipeline loop on TransCanada's Dawn Extension.

HEARD at Ottawa, Ontario on 20, 21, 22, 23, 26 and 27 September 1988.

BEFORE:

A.B. Gilmour	Presiding Member
J.R. Jenkins	Member
R.B. Horner, Q.C.	Member

APPEARANCES:

D.G. Hart, Q.C.	St. Clair Pipelines Ltd.
J.M. Murray J.H. Francis J.A. Schatz	TransCanada PipeLines Limited
T.G. Kane	ANR Pipeline Company
J.H. Farrell	The Consumers' Gas Company Ltd.
L.-C. Lalonde	Gaz Métropolitain, inc.
J.A. Giffen	Gout, Mr. Peter
J.H. Smellie	ICG Utilities (Ontario) Ltd.
R.J. Harrison	Michigan Consolidated Gas Company
K.L. Meyer	Pan-Alberta Gas Ltd.
N.J. Schultz J. Burke-Robertson	Tennessee Gas Pipeline Company
L.A. Leclerc	Trans Québec & Maritimes Pipeline Inc.
B.H. Kellock J.D. Murphy	Union Gas Limited

G. McNamara	Alberta Petroleum Marketing Commission
P.D. Morris K. Mullins	Minister of Energy for Ontario
J. Giroux	Procureur général du Québec
H. Soudek	National Energy Board

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Abbreviations

Act	National Energy Board Act
ANR	ANR Pipeline Company
Bcf	billion cubic feet
Board	National Energy Board
Consumers'	The Consumers' Gas Company Ltd.
FERC	(United States) Federal Energy Regulatory Commission
GMi	Gaz Métropolitain, inc.
Great Lakes	Great Lakes Gas Transmission Company
ICG	ICG (Ontario) Ltd.
km	kilometre(s)
kPa	kilopascal(s)
LDCs	local distribution companies
m	metre(s)
m^3	cubic metre(s)
m^3/d	cubic metre(s) per day
mg/l	milligrams per litre
MichCon	Michigan Consolidated Gas Company
mm	millimetre
MMcfd	million cubic feet per day
MNR	Ontario Ministry of Natural Resources
MoE	Ontario Ministry of Environment
NOVA	NOVA Corporation of Alberta
NPS	nominal pipe size (in inches)
O.D.	outside diameter
OEB	Ontario Energy Board
Panhandle	Panhandle Eastern Pipeline Co.

Polysar	Polysar Hydrocarbons Limited
St. Clair	St. Clair Pipelines Ltd.
TOPGAS	Topgas Holdings Limited and Topgas Two Inc.
TransCanada	TransCanada PipeLines Limited
Union	Union Gas Limited
U.S.	the United States of America
WGML	Western Gas Marketing Limited

Chapter 1

Background

1.1 The Application of St. Clair

By application dated 15 June 1988, St. Clair Pipelines Ltd. ("St. Clair") applied to the National Energy Board (the "Board") for an order pursuant to section 49 of the National Energy Board Act (the "Act"), exempting St. Clair from certain sections of the Act or, alternatively, a certificate of public convenience and necessity pursuant to section 44 of the Act. Approval by the Board of either application would have the effect of authorizing the construction and operation of a 700-m pipeline crossing of the St. Clair River. The pipeline would extend from the facilities of Michigan Consolidated Gas Company ("MichCon") at the international border under the centre of the St. Clair River, to a proposed extension to Union Gas Limited's ("Union") system in southwestern Ontario. Both St. Clair and Union are wholly-owned subsidiaries of Unicorp Canada Corporation.

St. Clair also applied to the Board, pursuant to section 50 of the Act, for an order approving the toll to be charged in respect of the proposed pipeline. However, upon learning that the Board regulates the tolls for small pipelines on a complaint basis, St. Clair withdrew this portion of its application by letter dated 2 August 1988.

The proposed 610-mm outside diameter ("O.D.") pipeline would connect the gas distribution and storage facilities of MichCon with those of Union. This would permit the exchange of gas between these two utilities under emergency or other conditions, and could serve as a new gas export or import point. In respect of the latter possibility, St. Clair stated in the application that one of the purposes of its pipeline was to provide eastern Canadian gas users with access to competitively priced American gas. St. Clair submitted that, by tying into American gas supply and storage sources, the security of supply to eastern Canadian customers would be enhanced.

The river crossing would be installed by directional drilling. Using this technique, a tunnel would be bored from the American to the Canadian side of the river. The entire length of pipe to be used for the river crossing would be assembled on the Canadian side of the river and pulled back through the bore hole to connect with MichCon's facilities on the American side. Construction was scheduled to begin in late summer 1988 and the pipeline was intended to be in service by 1 November 1988. Construction of the pipeline was to be contracted out to Union.

St. Clair's applied-for facilities consisted of 400 m of 12.9-mm wall thickness pipe under the river and 300 m of 10.7-mm wall thickness pipe from the river to Union's proposed connecting facilities. No valving or measurement facilities were included in the application. The facilities were estimated to cost $1,375,000 and were intended to provide a planned capacity of 5 660 $10^3m^3/d$ (200 MMcfd). The maximum design operating pressure was given as 9 420 kPa.

The custody transfer metering for the St. Clair pipeline would be located at MichCon's Belle River Mills compressor station. Pursuant to the tri-party agreement, St. Clair and Union would have access to all measurement information. Union proposed to install check metering facilities on its proposed St. Clair-Bickford Line approximately 5 km from the St. Clair pipeline.

To connect the St. Clair pipeline to the existing Union system, Union had applied to the Ontario Energy Board ("OEB") for approval to construct and operate an 11.73 km pipeline extension, known as the St. Clair-Bickford Line. MichCon also indicated its intention to construct 4.75 km of pipeline to connect its system at the Belle River Mills compressor station to the St. Clair pipeline.

The Board received letters in support of St. Clair's application from Gaz Métropolitain, inc. ("GMi")

and ICG Utilities (Ontario) Ltd. ("ICG") dated 12 and 18 July 1988, respectively. The Board also received a letter dated 28 June 1988 from TransCanada PipeLines Limited ("TransCanada") which raised a number of concerns about the proposed connection between MichCon and Union. Firstly, TransCanada raised the possibility that the Board should have jurisdiction over Union's St. Clair-Bickford line. Secondly, TransCanada indicated that it had a pipeline proposal to advance as an alternative to St. Clair's proposed facilities. Finally, TransCanada recommended that these issues would most appropriately be dealt with by way of a public hearing.

On 29 July 1988, the Board issued Order No. GH-3-88 setting St. Clair's application down for a hearing. The hearing order also stated the Board's decision, pursuant to section 11(b) of the Act, to hear and decide the question of jurisdiction over the proposed St. Clair-Bickford Line.

In response to TransCanada's suggestion that it had an alternative proposal, the Board directed TransCanada to provide details of its alternative by 29 August 1988.

1.2 The Application of TransCanada

By letter dated 29 August 1988, TransCanada submitted an application, pursuant to section 49 of the Act, for authorization to construct 3.3 km of 914 mm O.D. pipeline loop on TransCanada's Dawn Extension. The application detailed TransCanada's proposal to provide additional transportation service to Union and to other eastern Canadian local distributing companies ("LDCs"). The applied-for facilities were to commence from the terminus of a recently authorized pipeline loop at mainline valve 501 + 8.8-km. TransCanada also proposed modifications to its existing Dawn meter station to accommodate the increased flows. The applied-for facilities were estimated to cost $2,923,000.

TransCanada indicated that the proposed facilities would enable it to offer an incremental 1 500 $10^3m^3/d$ (53 MMcfd) of firm service and 5 660 $10^3m^3/d$ (200 MMcfd) of interruptible service. In its submission, TransCanada noted that this was the only capacity that St. Clair had contracted for, to date. TransCanada offered to undertake all necessary steps to have the 3.3 km of pipeline in service by 1 November 1988.

The proposed facilities would be located within TransCanada's multiple-line rights easement, thereby requiring additional temporary work space of only 10 m in width along its length, affecting 10 owners of land.

TransCanada submitted that, by eliminating an unnecessary duplication of facilities, significant cost savings could be realized. As well, it pointed out that its proposed facilities did not raise the types of environmental and land use issues that are normally associated with the provision of a new utility corridor, as envisaged by St. Clair's proposal.

On 31 August 1988, the Board issued Amending Order AO-1-GH-3-88, advising interested parties that it would consider both St. Clair's and TransCanada's application at the same proceeding.

1.3 Disposition of the Jurisdiction Issue

The pipeline proposed by Union, to connect its system to St. Clair's proposed facilities, would terminate at Union's Bickford storage pool compressor station. Union did not apply to the Board for authorization to construct the proposed connecting facilities known as the St. Clair-Bickford Line, having applied, instead, to the OEB, as noted above; however, the issue of jurisdiction over the St. Clair-Bickford Line was raised by TransCanada in a letter dated 28 June 1988.

During the OEB hearing of Union's application to construct the St. Clair-Bickford Line, TransCanada brought a motion for an order declaring that the subject matter of Union's application was not within the jurisdiction of the OEB but rather was within the exclusive jurisdiction of the Board. The OEB heard evidence and argument on TransCanada's motion. The motion was dismissed pursuant to the OEB Decision with Reasons issued 2 September 1988 in respect of Union's application.

By letter dated 13 September 1988, TransCanada advised the Board that it intended to seek leave to appeal the decision of the OEB in respect of the question of its jurisdiction over the St. Clair-

Bickford Line to the Ontario Divisional Court. As a result of this development, the Board, in a telex to parties of record dated 15 September 1988, questioned whether it was appropriate for it to proceed to hear and decide the question of jurisdiction over the St. Clair-Bickford Line in view of the fact that this question could shortly be *sub judice*.

The Board noted that it should avoid initiating a procedure which could result in proceedings in two different courts on similar issues and questions since duplication of proceedings is neither desirable nor productive. In this regard, the Board reminded parties of the decision of the Ontario Court of Appeal in respect of a Reference by the Lieutenant Governor in Council of Ontario concerning the legislative authority in relation to bypass pipelines (issued 15 February 1988; unreported). In that decision, the Court noted "the adverse effect on the administration of justice which results from the inconvenience, confusion, cost and delay caused by multiplicity of proceedings". The Court of Appeal further noted that "the courts have time and again emphasized the practical reasons for avoiding duplication and the unnecessary burden it places on them".

At the opening of the hearing, the Board heard submissions from parties of record on whether it should proceed to hear and decide the jurisdictional question.

The Board decided that it would not hear and decide the question of jurisdiction over the St. Clair-Bickford Line in the GH-3-88 proceeding. Notwithstanding this decision, the Board noted that it intended to consider all aspects of the St. Clair project and, in this context, would examine the nature and purpose of the connecting facilities in order to determine the merits of the applications before it.

Chapter 2

The Evidence

2.1 St. Clair's Project

2.1.1 Gas Supply

Union testified that it was currently finalizing its tender call with American suppliers for 142 10^6m^3 (5 Bcf) per year each of firm and interruptible gas supply. It added that bids for this supply had been received and that negotiations were in the final stages. Thus, final supply contracts had not been executed. It was Union's intention to initially contract for a one-year gas supply, to be followed by attempts to complete longer-term gas supply arrangements. Union testified that price would determine where it purchased its gas supply. It added that American spot gas, which is available in the summer, had recently been the least expensive source of supply.

Union noted that it would prefer to contract for western Canadian-sourced gas supply, assuming that it was priced competitively with American supply.

TransCanada argued that, while Union had testified that gas supply negotiations for 142 10^6m^3 (5 Bcf) per year each of firm and interruptible service were in the final stages with American suppliers, Union had failed to adduce any evidence to that effect. TransCanada also argued that the project sponsors had failed to furnish a gas supply/demand balance to demonstrate adequate gas supply, and had failed to adduce evidence to demonstrate that American gas suppliers would, in fact, be receptive to negotiating long-term, competitively priced, gas supply contracts. Therefore, it was TransCanada's position that St. Clair had failed to demonstrate that gas supply was committed to its project.

2.1.2 Gas Markets

Union indicated that the proposed St. Clair facilities would be used to access firm and interruptible gas supplies sourced from either the United States ("U.S.") or Canada. The facilities could also be used to export American or Canadian-sourced gas including, possibly, synthetic natural gas ("SNG") under contract with Petrosar Limited.

Union's own firm requirements were identified as 425 $10^3m^3/d$ (15 MMcfd) in the first year, rising to 850 $10^3m^3/d$ (30 MMcfd) and to 1 275 $10^3m^3/d$ (45 MMcfd) for the contract years beginning 1 November 1989 and 1990 respectively. The annual growth in Union's gas demand was forecasted by a witness for the Company to be in the range of 85 10^6m^3 (3 Bcf) to 142 10^6m^3 (5 Bcf). A much higher growth rate was envisaged in the demand for gas storage and transportation.

Evidence filed showed that St. Clair and GMi are currently considering a sales agreement, pursuant to which St. Clair would make available to GMi supplies of gas from the least expensive sources. St. Clair noted that the negotiations with GMi resulted from a forecasted gas supply shortage due to constraints on transportation capacity.

In addition to GMi, The Consumers' Gas Company Ltd. ("Consumers'"), Northridge Petroleum Marketing, Inc. ("Northridge"), and Vector Energy Inc. ("Vector") also advised St. Clair of their interest in contracting for pipeline capacity, depending upon whether the landed price of the gas was competitive with alternatives. Consumers' indicated that it would discuss its transportation needs with St. Clair further, once all the requisite authorizations with respect to the proposed and associated facilities had been received.

St. Clair testified that these letters of interest justified construction of the proposed facilities.

In support of its application, St. Clair testified that the proposed facilities would enhance the marketability of Canadian gas in both the Canadian do-

mestic and American markets, although it was unable to produce any studies or documentation to that effect.

Union noted that it would not be an export shipper on the St. Clair pipeline, although another Unicorp company could be. St. Clair identified the U.S. northeast and midwest, and the State of Michigan as possible export markets. Specifically, MichCon was identified as a prospective customer of Canadian-sourced gas exported through the St. Clair pipeline. St. Clair added that it could also serve any American markets currently connected with the ANR Pipeline Company ("ANR") interstate system.

TransCanada noted that St. Clair had failed to furnish any details of the market requirements, or any sales contracts or precedent agreements underpinning the proposed facilities. It argued that the letters from GMi, Consumers' and others, were no more than expressions of interest in contracting for the St. Clair pipeline capacity. Therefore, TCPL suggested that the proposed facilities were premature.

ICG rejected TransCanada's position that the facilities were premature. Instead, ICG argued that the St. Clair project should be viewed as being innovative and responsive to the complex issues facing the industry at this time.

2.1.3 Security of Supply

St. Clair submitted that its proposed connection with American facilities would enhance the security of supply to Canadian consumers in Ontario and Quebec. St. Clair testified that, by pooling storage facilities in Ontario and Michigan and by accessing alternative supplies, its proposed pipeline interconnection would benefit consumers on both sides of the border. Union testified that it had several "core" type direct purchasers on its system, which it believed required the company to have a back-up supply source in the event of a supply disruption.

Union and GMi expressed their concern regarding future security of gas supply, in light of increasing capacity constraints on the NOVA Corporation of Alberta ("NOVA"), Great Lakes Gas Transmission Company ("Great Lakes") and TransCanada pipeline systems.

MichCon testified that the exchange agreement negotiated with Union would allow gas to be freely exchanged across the border and would assist Union and MichCon, as well as their respective customers, to meet peak-day requirements and alleviate gas supply shortages caused by emergency situations. The agreement provides for short-term exchanges or borrowing of gas for a period of up to six months. St. Clair referred to the agreement as the cornerstone of the security of supply enhancement offered to eastern Canada by the St. Clair Project.

St. Clair noted that the TransCanada/Great Lakes proposal did not enhance security of supply since it offered neither direct or independent access to Michigan storage, nor a new link to the diverse sources of American gas supply. St. Clair argued that an alternate supply option was important, given the current difficulties in negotiating contracts for gas supply beyond 1 November 1988, the effects of TransCanada's commitments to the Topgas Holdings Limited and Topgas Two Inc. ("TOPGAS") convenants, and TransCanada's refusal to transport gas which displaces gas supply under contract with Western Gas Marketing Limited ("WGML").

It was TransCanada's position that, while it did not dispute the benefits of linking Michigan and Ontario storage facilities, security of supply to eastern Canadian consumers is already offered by the existing storage facilities and the existing Panhandle Eastern Pipeline Co. ("Panhandle") and TransCanada/Great Lakes systems. TransCanada acknowledged the enhancement of security of supply inherent in the St. Clair proposal, but believed it to be marginal.

From security of supply and supply enhancement perspectives, Consumers' argued that the existing Panhandle alternative could not be considered reliable. Similarly, Consumers' expressed concern regarding the regulatory lag inherent in the TransCanada proposal, the result of the required 7(c) Natural Gas Act certificate proceedings in the U.S. before the Federal Energy Regulatory Commission ("FERC"). For these reasons, and others, Consumers' argued that the TransCanada proposal could not be counted upon in the upcoming heating season. Consumers' noted that two of the long-term benefits of the St. Clair project would be enhanced security of supply, and accessibility to a diverse supply of competitively priced gas.

In response to Consumers' position that the Panhandle system did not represent a reliable alternative, TransCanada noted that this interconnection had been used to import as much as 708 10^6m^3 (25 Bcf) per year of American gas.

ICG argued that the independence of the St. Clair pipeline and its ability to tap diverse sources of supply would enhance supply security.

Union submitted that the St. Clair Project would offer a new link between Canadian consumers and American gas supply, pipeline and storage facilities, thereby enhancing security of supply. It argued that this position was not disputed by TransCanada. Union noted that the current impasse in the renegotiation of western Canadian gas supply contracts, and the current and anticipated capacity restrictions on the NOVA and TransCanada pipeline systems, had forced Union to pursue alternatives such as the St. Clair project.

St. Clair testified that 16.52 10^9m^3 (583 Bcf) of working storage existed in Michigan, virtually all of which was accessible through the MichCon system. MichCon testified that it had 4.25 10^9m^3 (150 Bcf) of storage. Union stated that there was approximately 0.57-0.71 10^9m^3 (20-25 Bcf) of storage in Ontario that could be economically developed. This was in addition to the 2.83 10^9m^3 (100 Bcf) of storage already developed by Union.

2.1.4 Existing Connections

St. Clair and Union argued that there was a clear need for the facilities notwithstanding existing international pipeline connections in Windsor and Sarnia. The Panhandle system, a major American interstate pipeline, is linked with the Union system via a dual 304 mm O.D. (nominal pipe size ("NPS") 12) crossing of the Detroit River near Windsor. St. Clair submitted that the Panhandle system did not offer the advantage of accessing competitively priced supplies through other major American pipeline systems. Secondly, its rates were non-competitive for short haul service and, finally, there was no firm capacity available on the Panhandle system. Although Union had imported 708 10^6m^3 (25 Bcf) through the Panhandle Line, during at least one previous year, the firm capacity of the interconnection was given as less than 0.85 $10^6m^3/d$ (30 MMcfd). Union explained that the total capacity available for imports from Panhandle varies depending upon its operations in the Windsor area.

The other existing international connection in the area is the Great Lakes/TransCanada dual 610-mm O.D. (NPS 24) river crossing adjacent to the site of the proposed St. Clair pipeline. The Great Lakes system interconnects with, among others, the ANR, MichCon and Panhandle pipeline systems. St. Clair submitted that Great Lakes was not an open access pipeline and, therefore, was not required to provide non-discriminatory service. Union submitted that it was unable to arrive at an acceptable service agreement after two years of negotiations with Great Lakes. Union also submitted that this link did not offer a direct connection between storage pools in Michigan and Ontario.

2.1.5 Capacity and Flexibility

The proposed St. Clair pipeline would have a nominal capacity of 5 660 $10^3m^3/d$ (200 MMcfd) in either direction. This capacity is based upon the minimum pressure at the international boundary as specified in the operating agreement. However, in the east to west direction, the capacity would be reduced to 3 504 $10^3m^3/d$ (125 MMcfd) on certain days due to operating restrictions. In the west to east direction, the firm capacity varies from 2 830 - 5 660 $10^3m^3/d$ (100-200 MMcfd) on a seasonal basis due to restrictions on the Union facilities. Principal among these is the requirement to use the downstream Bickford-Dawn Line for storage injection and withdrawal, thereby restricting the availability of this line for movements to and from St. Clair.

Evidence indicated that the west-to-east capacity of the proposed St. Clair pipeline could be raised to 14 160 $10^3m^3/d$ (500 MMcfd) by the completion of a second Bickford-Dawn Line at a cost of $9 million and by adding facilities to the MichCon system in the order of $(U.S.)17 million. However, this could also require additional facilities on the Union system and on the ANR system. The ultimate capacity of the proposed pipeline, based upon discharge of the gas at the maximum allowable operating pressure at Belle River Mills and assuming construction of a second Bickford-Dawn Line, would be approximately 31 700 $10^3m^3/d$ (1,120 MMcfd).

2.1.6 Competition

St. Clair stated that its proposal would result in increased competition because it would provide access to new supply sources for Canadian consumers and distributors and, moreover, would enhance access to both domestic and American markets for Canadian producers. Through a new link with MichCon, which has a direct connection with ANR, an open access pipeline, a connection would be provided to American suppliers in the Gulf Coast, Panhandle and Rocky Mountain districts. Furthermore, it was stated that the St. Clair proposal would provide an alternate link with western Canadian gas through Northern Border.

St. Clair also pointed out that the availability of an alternative to TransCanada's pipeline would increase the competition for gas transportation. A witness for St. Clair stated: "TransCanada has two arms. It is a transportation company, which is the monopoly long distance carrier in Canada and which owns 50 percent of Great Lakes. It also sells 78 percent of the gas sold in eastern Canada. It is the interconnection between these two which in my view makes the public benefits of an independent link paramount." In this regard, a witness for Union added that the main advantage of the St. Clair line might be the leverage it provided in negotiations with TransCanada and its agent, WGML.

Consumers', GMi, ICG, Union and Northridge agreed with St. Clair with respect to the advantages of increased competition in supply and transportation. Counsel for Consumers' pointed out that the existence of a competitive transportation service should compel TransCanada to move into the role of a proactive and innovative participant in a competitive environment.

TransCanada agreed that increased competition between suppliers was consistent with the 1985 Agreement and with free trade, but it questioned the advantages of transportation competition. In this regard, TransCanada noted that regulatory bodies such as the Board are intended to be a proxy for competition. St. Clair responded that competition could always assist the Board in fulfilling its mandate.

2.1.7 Accessibility

St. Clair testified that the pipeline's bi-directional capacity of 5 665 $10^3m^3/d$ (200 MMcfd) would be available to all prospective shippers on a non-discriminatory basis. St. Clair noted that under the terms of the agreement for transportation services, entered into between itself and Union, Union had fully contracted the available capacity, but was contractually committed to relinquish any unutilized capacity to other shippers on a non-discriminatory basis. St. Clair testified that, by having Union contract for the full capacity, the pipeline's financial viability would be assured.

Union confirmed that it was prepared to relinquish any unused pipeline capacity to any party wanting access.

Under the terms of the agreement, Union's relinquishment of unutilized capacity is subject to four conditions, intended to ensure that the "use it, or lose it" principle is adhered to. St. Clair noted that the determination of a legitimate request for capacity rests with Union. St. Clair testified that transportation service would be subject to terms and conditions to be incorporated into a transportation contract which, at the time of the hearing, was in the drafting stage. A third party, such as an LDC or broker, would thus contract with St. Clair for pipeline capacity and would be subject to the same terms and conditions as Union.

In accordance with the operating agreement entered into between MichCon, Union and St. Clair, the volumetric capacity of their respective pipelines would be allocated on a "first come, first served" basis, with firm service having priority over interruptible. Should there be insufficient capacity, firm service would be curtailed or interrupted on a pro rata basis, in accordance with the contracted volumes. In addition, interruptible service would be made available to the extent there was capacity and service would be subject to curtailment in accordance with the conditions specified in the agreement.

With respect to access to the MichCon system, MichCon submitted that a section 7(c) order from the FERC would not be necessary. However, a Presidential Permit or section 3 authorization from the FERC, and a Facilities Certificate from the Michigan Public Service Commission ("MPSC"), were required and MichCon testified

that substantial progress had been made towards obtaining these. St. Clair noted that MichCon would offer its services on a non-discriminatory and competitive basis.

With respect to access to the St. Clair-Bickford Line, Union testified that it was operated as an open system and that the terms and conditions of service that would apply to this line were those that were currently in effect for transportation service elsewhere on its system.

Union noted, with respect to its own gas supply, that it had executed the necessary transportation agreements with St. Clair and MichCon, and that the transportation arrangements with ANR were being finalized.

2.1.8 Environmental Issues

St.Clair's river crossing would be located 6 m below the St. Clair River bed. The crossing would be directionally drilled and the pipe prefabricated, tested and pulled from temporary work space within Ontario Hydro fee lands.

In support of its application, St. Clair provided environmental material including borehole data, a statement of required regulatory approvals, and a report by its consultant respecting drilling fluid handling and containment procedures.

In its evidence, TransCanada suggested that the environmental impact of the St. Clair facilities, in conjunction with those of Union and MichCon, exceeded the impacts of TransCanada's proposed alternative. It was subsequently established that the considerations of the Board were limited solely to the facilities proposed in the St. Clair application.

During the hearing there was discussion of the possible environmental implications of the project. Some of the issues raised included regulatory approvals, borehole log and river bed analysis, and drilling mud additives, toxicity and reclamation.

St. Clair indicated that regulatory approvals were required from the Canadian Coast Guard, the International Boundaries Commission, Ontario Hydro, the Township of Moore, the County of Lambton, Bell Canada, the Ontario Ministry of Natural Resources ("MNR"), the St. Clair Region Conservation Authority, the St. Clair Parkway Commission, and the Ontario Ministry of Environment ("MoE"), and indicated that all regulatory approvals had been obtained. MichCon indicated that of the ten U.S. regulatory authorizations required, four had been secured and the remaining six were under consideration.

St. Clair provided the results of two 6 1/2-inch borehole logs taken from the banks of the St. Clair River in the Township of Moore, Ontario, and East China Township, Michigan. These logs, together with river bottom soundings, were used to determine to what depth directional drilling would be required and the probable strata through which the drilling would pass.

During examination, TransCanada suggested that additional boreholes should have been performed across the river bed to provide a better indication of substrata. It further suggested that the results of the crossing by Polysar Hydrocarbons Limited ("Polysar"), was not a reliable indicator of a continuous clay layer at St. Clair's crossing because the former was located 11 kilometres upstream.

MichCon, as the principal co-ordinator of the directional drilling contract, introduced further evidence which indicated that directional drilling was selected due to the minimum environmental disturbance created by the process. It indicated that discussions with Polysar and with Polysar's prime contractor and sub-contractors suggested a correlation of soil borings between the two locations and supported the conclusion that at the location of the St. Clair project a continuous clay layer existed under the river bed. Therefore, no complications or problems with contamination were expected.

Directional drilling normally involves the use of a directionally controlled water jet to create a small diameter pilot hole 6-10 m beneath the river bed. The pilot hole is then back-reamed to the desired diameter and the prefabricated pipeline string is pulled through the hole. To assist the operation, drilling mud is pumped into the borehole to lubricate the drill bit, stabilize the hole and remove the cuttings.

St. Clair provided information respecting the drilling fluid composition, the collection (sump) pit design for drilling fluid containment, the re-

sults of laboratory testing to separate the supernatant (water) from suspended solids, and correspondence from the MoE regarding the appropriate testing and disposal methods.

During examination, TransCanada questioned the possibility of the drilling fluid becoming contaminated by the seepage of sediments from the river bed. St. Clair indicated that the testing of sludge by MoE would detect any contamination.

The potential effects of chemical contamination due to drilling fluid additives was also raised by TransCanada. MichCon stated that the drilling fluid would only consist of bentonite and water.

Drilling fluid separation and disposal were also raised as issues during the hearing. St. Clair's evidence indicated that a collection pit of 0.32 hectares of surface area with a 2.1 m depth would be required to contain an estimated 3 860 m^3 (1.0 x 10^6 gallons) of generated drilling fluids. That fluid would be mixed with polyaluminium chloride (Alumex 2) and an anionic polymer (Alchem 85030), at rates of 500 and 200 mg/l, to produce, by MoE standards, water of sufficient quality for reintroduction to the St. Clair River, and a sludge of 14 percent solids, which is considered to be inert landfill suitable for disposal at an unregistered landfill site. The quality of water to be returned to the river and the method of sludge disposal would be monitored by MoE.

TransCanada's examination also focussed on the limit of chemical additives that could be present before the treated waste would be subject to Ontario Regulation 309, Waste Management - General Regulations. No evidence was provided to establish that limit. MichCon and St. Clair confirmed that the chemicals were common water purification additives. Further, it was established that, if Ontario Regulation 309 applied, a registered waste disposal site operated by Tricil (Sarnia) Limited existed in Sarnia.

The requirements for the land proposed to be occupied by St. Clair include a licence of occupation from the MNR and easements from Ontario Hydro and one private owner. Each easement would have a width of six metres. In addition, St. Clair would require 10.75 hectares of temporary work space from Ontario Hydro to prefabricate and test the river crossing pipeline and to excavate the drilling fluid sump. In securing those lands, St. Clair served notices of land acquisition, pursuant to section 75(1) of the Act, on Ontario Hydro and the one private owner. Further, St. Clair has reached agreement for the easement and licence of occupation with Ontario Hydro and the MNR.

2.2 TransCanada's Project

2.2.1 Capacity and Flexibility

TransCanada's proposed pipeline loop on the Dawn Extension would provide firm capacity to move 1.5 $10^6 m^3/d$ (53 MMcfd) from MichCon's Belle River Mills compressor station to Union's Dawn compressor station. TransCanada also indicated that there would be, on average, 6.2 $10^6 m^3/d$ (218 MMcfd) of interruptible service available from Belle River Mills to Dawn and in excess of 14.3 $10^6 m^3/d$ (400 MMcfd) on occasion.

TransCanada moves gas from Emerson, Manitoba to the Dawn Extension pursuant to its T-4 contract with Great Lakes. TransCanada previously applied to the Board and received approval to construct 8.8 km of pipeline loop on the Dawn Extension, in order to allow for anticipated increased T-4 transportation on Great Lakes. However, TransCanada indicated that this anticipated increase in the contract did not occur and therefore the incremental capacity being provided on the Dawn Extension could be available to provide interruptible service from Belle River Mills to Dawn. TransCanada testified that it would require transportation on Great Lakes in excess of its T-4 contract in order to meet its firm requirement for 1988-89. This overrun service would have priority over the interruptible service between Belle River Mills and Dawn. TransCanada also testified that it moves interruptible volumes from western Canada via its T-4 Great Lakes contract and that such volumes would also have priority over the interruptible volumes originating at Belle River. These factors, in addition to the requirements of other Great Lakes shippers, would reduce the capacity available for interruptible service from Belle River Mills to Dawn.

MichCon testified that, subject only to a review of its metering facilities, it would not require any additional facilities to deliver 5.66 $10^6 m^3/d$ (200 MMcfd) into the Great Lakes system at Belle River Mills.

TransCanada submitted that its existing facilities could accommodate the 0.42 $10^6m^3/d$ (15 MMcfd) of firm transportation from Belle River Mills to Dawn that was being considered by Union for the first year. In that sense, TransCanada argued that, since there was currently no other demonstrated gas requirements, further facilities additions by either TransCanada or St. Clair were unnecessary at this time.

The TransCanada proposal does not contemplate the east to west movement of gas (from Dawn to Belle River Mills); however, TransCanada suggested that such transactions could be accommodated by displacement and arrangements could be made with Great Lakes for this service.

TransCanada indicated that the firm capacity available from its project could be increased to 5.66 $10^6m^3/d$ (200 MMcfd) by increasing the amount of pipeline loop to 8.4 km. Further increases would be available by adding more pipeline loop to the Dawn Extension and by contracting for higher pressure from Great Lakes.

2.2.2 Competition

TransCanada stated that its proposal would provide service equivalent to that proposed by St. Clair, and in particular would allow access to the same American suppliers. Moreover, TransCanada stated that it would not oppose increasing access to American and Canadian suppliers, as long as such supplies were incremental to the existing Canadian firm service market.

St. Clair pointed out that TransCanada's proposal is a loop of an existing pipeline and, therefore, it would not increase diversity and hence competition, particularly in terms of transportation. It noted that because Great Lakes is a non-open access carrier, competition could be hampered by TransCanada's proposal. Furthermore, St. Clair argued that the TOPGAS commitments provide an economic incentive for TransCanada to subordinate direct sales volumes relative to system supply, thus denying competitive market prices to Canadian users.

Both Northridge and GMi believed that TransCanada's proposal could increase competition among suppliers; however, they believed it would not be as effective as the St. Clair proposal. These intervenors suggested that the Board could approve both proposals but, if it were to approve only one of them, it should be the St. Clair proposal.

2.2.3 Accessibility

TransCanada indicated that the conditions of access and the terms and conditions of service for its proposed alternative would be those which are currently in effect.

TransCanada testified that in order to access the Great Lakes system, a prospective shipper must complete and submit a transportation service request form. TransCanada acknowledged that other terms and conditions would also apply to accessing Great Lakes. It further noted that transportation service is subject to Great Lakes' service tariff, volume 2, which specifies requirements such as delivery pressure and quality of gas as well as other standard "boiler plate" conditions.

Under the TransCanada proposal, a prospective shipper such as Consumers' or GMi would arrange for its own gas supply and its own transportation service to the Great Lakes pipeline at St. Clair, Michigan. From this point TransCanada would transport the gas through its Dawn Extension to the Union system interconnection. Transportation service on the Union system to Trafalgar, Ontario and beyond would also be the responsibility of the shipper.

TransCanada testified, however, that neither Consumers' nor GMi had approached it regarding either firm or interruptible service.

GMi testified that it had sufficient capacity under its M-12 service contract with Union and its STS contract with TransCanada to permit gas to be transported between Dawn and its franchise area in Québec. Union confirmed that such capacity would be available to GMi and other eastern Canadian LDCs.

St. Clair acknowledged that TransCanada did offer non-discriminatory contract carriage on its system. However, St. Clair argued that Great Lakes was not an open access pipeline and that it had not applied for a blanket order under FERC Order 436/500, thus leaving itself as a section 7(c)

transporter. St. Clair noted that in the case of a section 7(c) transporter, prospective shippers are required to obtain their own section 7(c) orders. It estimated that this process could take anywhere from nine to twelve months. St. Clair also noted that such orders are not normally granted for a term greater than twelve months. St. Clair was also of the opinion that a section 7(c) shipper could be refused service outright, or be offered service on discriminatory terms.

St. Clair testified that the St. Clair project resulted, in part, from the fact that Union had been unsuccessful in negotiating suitable transportation service with Great Lakes, despite an effort spanning nearly two years.

In response, TransCanada argued that despite the assertions of St. Clair and Union, the correspondence between Union and Great Lakes, filed at the hearing, demonstrates Great Lakes' willingness to provide transportation service between Belle River Mills and St. Clair, Michigan as well as to provide access to Michigan storage.

TransCanada further argued that the evidence with respect to the time needed to obtain a section 7(c) order and the term for which such an order might be issued was weak and, therefore, inconclusive.

Reasons for Decision

The evidence indicated that a link between Union and MichCon's storage and transportation facilities could offer a degree of back-up capability to eastern Canadian consumers, in the event of a failure on the NOVA - TransCanada - Great Lakes delivery network. Such an arrangement would also offer a host of new supply options that could encourage greater competition in the marketplace amongst Canadian producers and between Canadian and American producers. All of the parties at the hearing supported these goals. The Board finds them to be consistent with and conducive to fostering a market-oriented pricing regime in the domestic market, which was one of the stated objectives of the Intergovernmental Natural Gas Agreement dated 31 October 1985.

On the basis of the evidence adduced at the hearing,it would appear that the option of attaining these goals through the existing Panhandle connection at Windsor is inferior to that of constructing the proposed facilities for a number of reasons. Capacity on the Panhandle line for firm transportation appears to be both constrained and uneconomic. As well, the capacity of Union's connecting facilities is incapable of moving the incremental volumes planned for. Furthermore, this scenario would not offer the advantages of servicing some new regions of southwestern Ontario through the St. Clair-Bickford Line, or of directly linking the storage pools of Michigan and Ontario.

The new facilities proposed by St. Clair would provide eastern Canadian gas users with a direct connection to major American gas-producing regions via open access carriers. This would enhance their supply diversity and could provide greater flexibility in negotiations with western Canadian suppliers, including WGML.

St. Clair's proposed facilities provide for gas flow in either direction, thus enhancing operating flexibility, and contributing to a more effective and efficient operation of pipeline systems.

Although the Board is not convinced that the pipeline would be fully utilized in the short term, Union has contracted for 100 percent of the capacity initially, which essentially underwrites the capital risks. As well, in the longer term, as the current American gas bubble dissipates, the proposed facilities would potentially offer Canadian producers access to new export markets via an alternative conduit.

From an environmental perspective, the Board believes that as long as the directionally drilled construction technique is successful, the potential for environmental impacts is minimal. The Board will monitor the project carefully to ensure that environmental undertakings are fulfilled and sound environmental policies are practiced.

For all of the above reasons, the Board finds the facilities proposed by St. Clair to be in the public interest. Accordingly, the Board has issued Board Order No. XG-27-88, the effect of which is to authorize St. Clair to proceed with the construction and operation of the proposed facilities, subject to the fulfillment of certain conditions.

The Board finds that the inability to offer open access, reversible flow between MichCon and Union makes the TransCanada proposal a less attractive alternative.

An increment of capacity on the existing international interconnection does not offer the security of supply enhancement associated with the new connection proposed by St. Clair. This new connection will serve to back up existing supply services for eastern Canadian consumers. In addition, the St. Clair project will provide eastern Canadian consumers with access to American sources of supply, thus improving their flexibility in the matter of gas purchasing.

For these reasons, the Board does not find the TransCanada alternative to be in the public interest. The TransCanada application is denied.

Disposition

The foregoing chapters, together with Order No. XG-27-88, constitute the Board's Reasons for Decision and Decisions on these applications.

A.B. Gilmour
Presiding Member

J.R. Jenkins
Member

R.B. Horner, Q.C.
Member

Ottawa, Canada
October 1988

Appendix I

List of Issues
(Taken from Exhibit A-1 to the GH-3-88 Proceedings)

This list is intended to assist all parties in defining the key issues to be addressed at the hearing. This will not preclude the Board from dealing with other matters which are normally raised by virtue of the Board's mandate pursuant to the NEB Act.

At the hearing the Board will consider, *inter alia*, the following matters:

1. Public Interest Issues

   Are the applied-for facilities in the public interest having regard to the following questions:

   (a) Does the proposed pipeline enhance the security of supply for Canadian consumers?

   (b) Are the proposed facilities necessary in light of existing international gas pipeline connections in Sarnia and Windsor?

2. Jurisdiction

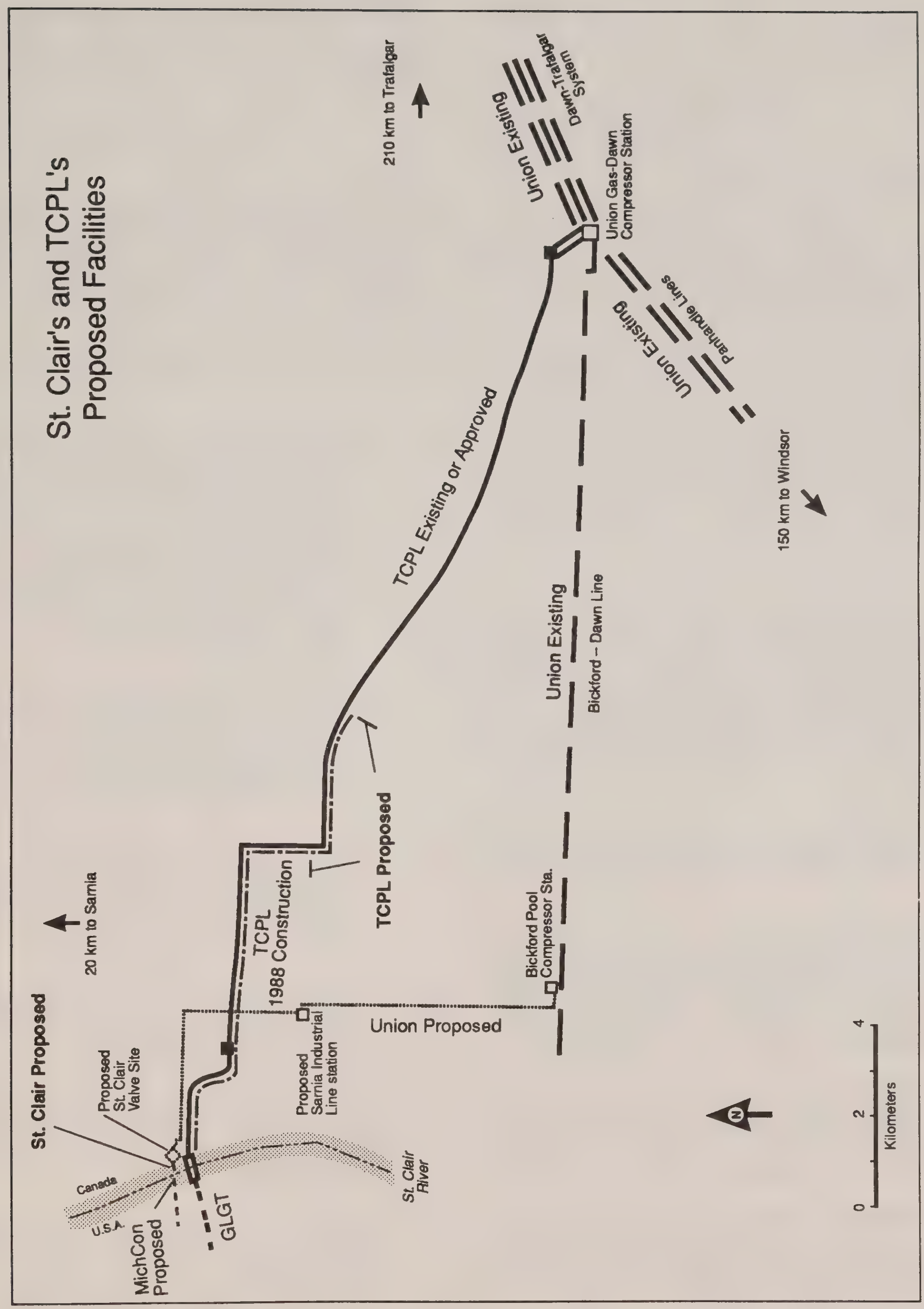
   Is the St. Clair-Bickford line an integral part of an international or interprovincial work or undertaking, within the exclusive legislative authority of Parliament pursuant to paragraph 92(10)(a) of the Constitution Act, 1867, having regard to the following factors:

   (a) The fact of the physical interconnection between the St. Clair-Bickford line and the applied-for facilities.

   (b) The extent of common ownership and corporate organization between the St. Clair-Bickford line and the applied-for facilities.

   (c) The degree of operational integration between the St. Clair-Bickford line and the applied-for facilities.

   (d) The purpose(s) to be served by the St. Clair-Bickford line.


St. Clair's and TCPL's
Proposed Facilities
210 km to Trafalgar
Union Existing
Dawn-Trafalgar
System
Union Gas-Dawn
Compressor Station
Panhandle Lines
Union Existing
150 km to Windsor
TCPL Existing or Approved
Union Existing
Bickford -- Dawn Line
TCPL Proposed
TCPL
1988 Construction
Bickford Pool
Compressor Sta.
20 km to Sarnia
St. Clair Proposed
Proposed
St. Clair
Valve Site
Proposed
Sarnia Industrial
Line station
Union Proposed
Canada
U.S.A.
MichCon
Proposed
GLGT
St. Clair
River
N
0
2
4
Kilometers

NEB Decision Dated 17 October 1988 Regarding the Application of St. Clair Pipelines Ltd.

ORDER NO. XG-27-88

IN THE MATTER OF the *National Energy Board Act* (hereinafter referred to as "the Act") and the Regulations made thereunder; and

IN THE MATTER OF an application, dated 15 June 1988, by St. Clair Pipelines Ltd. (hereinafter referred to as "St. Clair") pursuant to Parts III and IV of the Act, seeking, *inter alia*, in respect of certain pipeline facilities an order exempting those pipeline facilities from the provisions of certain sections of the Act; filed with the Board under File No. 1555-S119-1.

B E F O R E the Board on 17 October 1988.

WHEREAS St. Clair has represented that its proposed pipeline facilities are required to transport natural gas between the facilities of Michigan Consolidated Gas Company (hereinafter referred to as "MichCon") in the State of Michigan and those of Union Gas Limited in the Province of Ontario;

AND WHEREAS St. Clair, by letter dated 2 August 1988, withdrew its application under Part IV;

AND WHEREAS St. Clair has represented that its proposed pipeline facilities will provide, *inter alia*, increased accessibility to supplies of competitively priced United States gas and increased security of supply to gas users in eastern Canada;

AND WHEREAS a public hearing has been held pursuant to Hearing Order GH-3-88, in the City of Ottawa, in the Province of Ontario, at which the Board heard St. Clair and all interested parties;

AND WHEREAS the Board has found that the facilities proposed by St. Clair described in Schedule "A" attached to and forming part of this order, are in the public interest;

IT IS ORDERED THAT pursuant to section 49 of the Act, the facilities described in Schedule "A" attached hereto are exempt from the provisions of paragraph 26(1)(a), subsection 26(2) and section 27 of the Act upon the following conditions:

1. St. Clair, prior to commencement of construction, shall file with the Board:

   i) evidence that demonstrates, to the Board's satisfaction, that all necessary United States regulatory approvals have been granted in final non-appealable form in respect of the anticipated import volumes and in respect of any facilities on the Michigan Consolidated pipeline system necessary to give effect to the St. Clair pipeline project; and

   ii) evidence that Ontario Minister of Environment approval has been received in respect of the final sump pit design specifications and waste material testing and disposal procedures; and

   iii) evidence that easement agreements have been executed by all owners of lands proposed to be acquired in connection with the facilities described in Schedule "A" attached hereto.

2. St. Clair shall provide notice to the Board 48 hours prior to the commencement of the directional drilling program.

3. St. Clair shall utilize the directionally controlled drilling construction technique for the St. Clair River crossing as described in its application.

4. St. Clair shall, within six months of the date that leave to open is granted for the approved facilities, file with the Board a post-construction environmental report which

describes the success of the environmental protection and restoration measures taken.

5. St. Clair shall cause the construction and installation of the facilities, herein referred to, to be commenced on or before 31 December 1989.

NATIONAL ENERGY BOARD

Louise Meagher
Secretary

SCHEDULE "A"

Description	**St. Clair's Estimated Costs**
700 metres of 610 mm O.D. pipeline from the International Border to the St. Clair Valve Site	$1,375,000